

Nov. 9, 1937.

W. SCHNEIDER ET AL

2,098,891

PHOTOGRAPHIC MATERIAL

Filed Nov. 16, 1934

Fig. 1

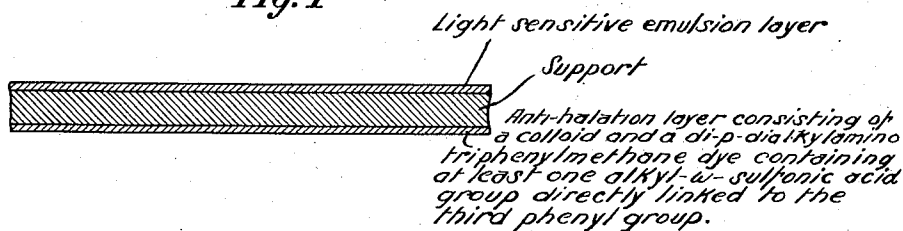


Fig. 2

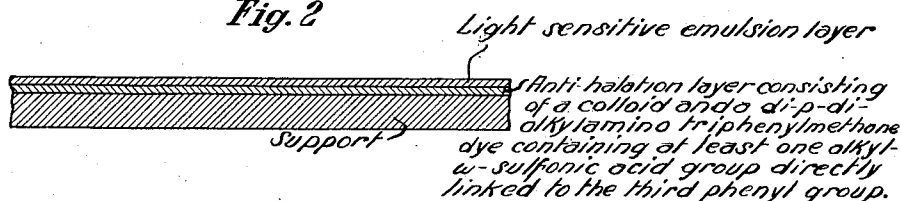
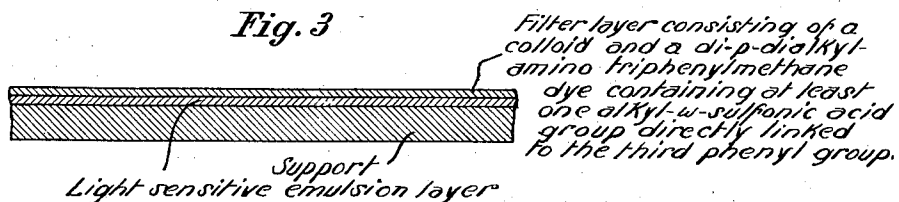


Fig. 3



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UNITED STATES PATENT OFFICE

2,098,891

PHOTOGRAPHIC MATERIAL

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Application November 16, 1934, Serial No. 753,390
In Germany November 18, 1933

4 Claims. (Cl. 95-8)

Our present invention relates to the manufacture of anti-halation layers or filter layers.

One of its objects is to provide an improved anti-halation or filter layer. Further objects will be seen from the detailed specification following hereafter. Reference is made to the accompanying drawing in which

Figs. 1 and 2 show a photographic plate or film provided with an anti-halation layer, and Fig. 3 shows a photographic plate or film provided with a filter layer.

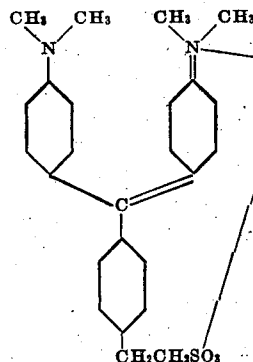
The triphenylmethane dyestuffs hitherto used for dyeing colloid layers intended to serve as anti-halation layers or filter layers suffer from great disadvantages; either they cannot be decolorized completely at the beginning of the treatment in the treating baths or they are reformed during the process of drying in the air. Most dyestuffs of this series and more particularly those which have no sulfonic acid groups suffer from the further disadvantage of a tendency to fogging or of an adverse effect on the sensitivity when they come into contact with the photographic layer. Both properties render them unsuitable for use for photographic purposes.

By this invention these disadvantages are avoided by dyeing colloid layers of the kind in question with dyestuffs of the triphenylmethane series in which one or more sulfalkyl groups are introduced into the dyestuff. The manufacture is carried out as described in German patent—(application I. 48,335 IVa/22b). These dyestuffs have the advantage that they are decolorized very easily and completely in developers and also washed out of the gelatine. Consequently there is no fear of the color returning during the operation of drying in the air. Moreover, the dyestuffs do not have the very adverse effects on the emulsion which are associated with the use of triphenylmethane dyestuffs that are not thus substituted.

The following examples illustrate the invention:

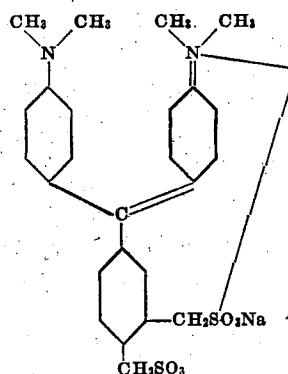
Example 1.—A green anti-halation layer is

obtained by adding about 1-5 grams of the dyestuff



to 100 grams of gelatin.

Example 2.—In like manner a green anti-halation layer is obtained by adding to gelatin a dyestuff of the following constitution:



Any other substance of colloidal character may, of course, be used instead of the gelatin.

Figs. 1, 2, and 3, which show an anti-halation layer or a filter layer on a photographic film or plate are believed to be self explanatory.

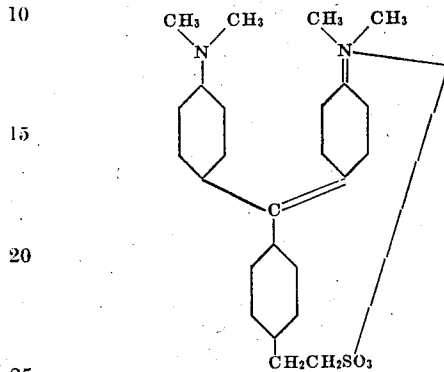
What we claim is:

1. A photographic material comprising attached to each other a support, a light-sensitive emulsion layer and a layer comprising a colloid and a di-p-dialkylaminotriphenylmethane dye containing at least one alkyl- ω -sulfonic acid group directly linked to the third phenyl group.

2. A photographic material comprising at-

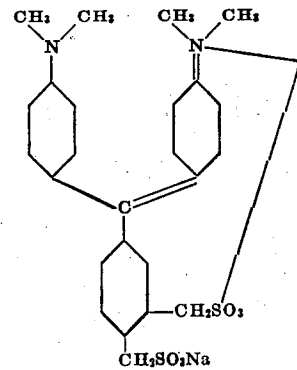
tached to each other a support, a light-sensitive emulsion layer and a layer comprising gelatin and a di-p-dialkylaminotriphenylmethane dye containing at least one alkyl- ω -sulfonic acid group directly linked to the third phenyl group.

3. A photographic material comprising a support, a light-sensitive emulsion layer and a layer comprising gelatin and a dye corresponding with the formula



attached to each other.

4. A photographic material comprising a support, a light-sensitive emulsion layer and a layer comprising gelatin and a dye corresponding with the formula



attached to each other.

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